20

25

30

5

## WHAT IS CLAIMED IS

- A purified polynucleotide comprising a nucleic acid sequence which encodes a
  polypeptide having at least about 80% homology to a member selected from the group
  consisting essentially of: (SEQ ID NO:3, SEQ ID NO:3 positions 1-25, SEQ ID NO:3
  positions 1-122, SEQ ID NO:3 positions 26-422, and SEQ ID NO:3 positions 123-422).
- 2. A polynucleotide according to Claim 1 comprising a nucleic acid sequence which encodes a polypeptide comprising the sequence as depicted in SEQ ID NO:3.
- 3. A polynucleotide according to Claim 1 comprising a nucleic acid sequence which encodes a polypeptide comprising the sequence as depicted in SEQ ID NO:3 wherein position 147 (Lysine) of SEQ ID NO:3 is substituted or deleted.
- 4. A polynucleotide according to Claim 3 comprising a nucleic acid sequence which encodes a polypeptide comprising the sequence as depicted in SEQ ID NO:3 wherein position 147 of SEQ ID NO:3 is Arginine.
- 5. A polynucleotide according to Claim 1 comprising a nucleic acid sequence which encodes a polypeptide comprising a sequence selected from the group consisting essentially of: (SEQ ID NO:3 positions 1-25, SEQ ID NO:3 positions 1-122, SEQ ID NO:3 positions 26-422, and SEQ ID NO:3 positions 123-422).
- 6. A polynucleotide of Claim 2 wherein the polynucleotide sequence comprises the sequence as depicted in SEQ ID NO:2.
- 7. An antisense molecule comprising an oligomer in the range from about 12 to about 25 nucleotides in length which: (a) is complementary to a region within positions 67-148 of SEQ ID NO:1; or, (b) comprises a sequence which is complementary to a sequence selected from the group consisting of: (SEQ ID NO:1 positions 67-79; 70-82; 73-85; 75-92; 76-88; 79-91; 80-92; 81-93; 82-94; 83-95; 84-96; 85-97; 86-98; 87-99; 88-100;

5

89-101; 90-102; 91-103; 92-104; 93-105; 94-106; 95-107; 96-108; 97-109; 98-110; 99-111; 100-112; 101-113; 102-114; 103-115; 104-116; 105-117; 106-118; 107-119; 108-120; 109-121; 110-122; 111-123; 112-124; 113-125; 114-126; 115-127; 116-128; 117-129; 118-130; 119-131; 120-132; 121-133; 122-134; 123-135; 124-136; 125-137; 126-138; 127-139; 128-140; and 136-148).

- 8. An antisense molecule comprising an oligomer in the range from about 12 to about 25 nucleotides in length which: (a) is complementary to a region within positions 1333-1414 of SEQ ID NO:1; or, (b) comprises a sequence which is complementary to a sequence selected from the group consisting of: (SEQ ID NO:1 positions 1333-1345; 1336-1348; 1339-1351; 1342-1354; 1345-1357; 1346-1358; 1347-1359; 1348-1360; 1348-1365; 1349-1361; 1350-1362; 1351-1363; 1352-1364; 1353-1365; 1354-1366; 1355-1367; 1356-1368; 1357-1369; 1358-1370; 1359-1371; 1360-1372; 1361-1373; 1362-1374; 1363-1375; 1364-1376; 1365-1377; 1366-1378; 1367-1379; 1368-1380; 1369-1381; 1370-1382; 1371-1383; 1372-1384; 1373-1385; 1374-1386; 1375-1387; 1376-1388; 1377-1389; 1378-1390; 1379-1391; 1380-1392; 1381-1393; 1382-1394; 1383-1395; 1384-1396; 1385-1397; 1386-1398; 1387-1399; 1388-1400; 1389-1401; 1390-1402; 1391-1403; 1392-1404; 1393-1405; 1394-1406; and 1412-1414).
- 9. An expression vector comprising the polynucleotide of Claim 1.
  - 10. A host cell transformed with the expression vector of Claim 9.
- or a variant of SEQ ID NO:3 having at least about 80% homology to a member selected from the group consisting essentially of: (SEQ ID NO:3, SEQ ID NO:3 positions 1-25, SEQ ID NO:3 positions 1-122, SEQ ID NO:3 positions 26-422, and SEQ ID NO:3 positions 123-422).
- 30 12. An antibody specific for the polypeptide SEQ ID NO:3.

5

- 13. A method for producing a polypeptide according to Claim 11, said method comprising the steps of:
  - a) culturing a host cell according to Claim 10 under conditions suitable for the expression of said polypeptide, and
  - b) recovering said polypeptide from the host cell culture.
- 14. A method of identifying compounds that modulate a biological and/or pharmacological activity of a tyrosine kinase, comprising:
  - a) combining a candidate compound modulator with a polypeptide according to Claim
     11, and measuring an effect of the candidate compound modulator on the biological
     and/or pharmacological activity of the polypeptide.
- 15. A method of identifying compounds that modulate a biological and/or pharmacological activity of a tyrosine kinase according to Claim 14, comprising:
  - a) combining a candidate compound modulator with a host-cell which expresses said polypeptide, and
  - b) measuring an effect of the candidate compound modulator on the biological and/or pharmacological activity of the polypeptide.
- 20 16. A compound that modulates the activity of a tyrosine kinase identified by the method of Claim 14.
  - 17. A method of treatment of a patient in need of such treatment for a condition which is mediated by a tyrosine kinase, comprising administering an effective amount of a compound according to Claim16.
  - 18. A method of modulating a biological and/or pharmacological activity of a tyrosine kinase in a cell comprising administering an effective amount of a polynucleotide according to Claim 1 to said cell.

25

- 19. A method for modulating the expression of a tyrosine kinase in a cell comprising administering an effective amount of an antisense molecule according to Claim 7 or Claim 8 to said cell.
- 5 20. A diagnostic composition, for the identification of a polypeptide comprising the amino acid sequence as depicted in SEQ ID NO:3, comprising the antibody of Claim 12.
  - 21. A diagnostic composition for the identification of a polynucleotide sequence comprising PCR primers derived from SEQ ID NO:1 or allele sequences representative of 11, 12, 13 or 15 GT repeats between positions 2125 and 2152 of SEQ ID NO:1.

\* \* \*